Unraveling structure and dynamics by confocal microscopy

Manca, Marianna

Stellingen behorende bij het proefschrift

Unraveling Structures and Dynamics by Confocal Microscopy

from starch to organic semiconductors

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Peripheral amylose molecules in starch granules are able to form inclusion complexes specifically interacting with the aliphatic chain of a ligand (*Chapter 3 and 4 of the thesis*).

Inclusion complex formation between amylose chains and lipophilic molecules occurs at temperatures well below the gelatinization temperature of starch (*Chapter 3, 4 and 5 of the thesis*).

Amylose-lipid inclusion complex formation in starch granules occurs within tens of seconds (*Chapter 5 of the thesis*).

Confocal Laser Scanning Microscopy is a powerful tool to correlate morphological features and photo physical properties of a sample (*Chapter 4 and 6 of the thesis*).

A charge transfer state (CTS) is an excited state where the electron and hole are weakly bounded by Coulombic forces and are delocalized over nearest molecular sites.

Charge transfer state emission is assigned to microscopical regions of the blend where the polymer and the fullerene derivative are more intimately mixed (*Chapter 6 of the thesis*).

Music and research do not impact directly to each other although they can complementarily give satisfaction to who perform both of them (*adapted from E. Einstein*).

In research a mistake makes you a fool, many mistakes make you an expert.

The perception of time is subjective and depends severely on the age of the perceiver.

If you are undecided whether pursuing a music career or a science one, you can always sing in the lab and reason under the shower. Maybe does not make you efficient, but it can make you smile.

It is written in stone that lithography is temporary.